INDEX.

ARTICLES MARKED WITH AN ASTERISK ARE ILLUSTRATED.

PAGE

Aggression, External and Internal. (Table) 386
Agnosticism and Naturalism, Professor Ward on. H. Spencer 349
Agricultural Education in Foreign Countries. W. E. De Riemer 218
Agriculture: Alkali Soils in Montana. (Frag.) 734
" Manuring with Brains. (Frag.) 731
" Sea Water, Effect of, on Soil. (Frag.) 508
Air Flight, Early Experiments in. M. B. Rivet 603
Alkali Soils in Montana. (Frag.) 734
Allen, Grant, Death of. (Frag.) 389
Amazonian Pygmies, Stories of. (Frag.) 733
A More Excellent Way. (Table) 729
Anarchist, A Paradoxical. C. Lombroso * 312
Anglo-Saxon Superiority. (Frag.) 620
Animals of the Ocean Depths. (Frag.) 736
" Reason? Do. Rev. E. R. Young * 105
" " " (Corr.) 122
Annual Flowers. (Frag.) 394
Anthropological Traits, Zola's. (Frag.) 388
Anthropology: Amazonian Pygmies, Stories of. (Frag.) 733
" Anglo-Saxon Superiority. (Frag.) 620
" A Survival of Mediæval Credulity. E. P. Evans 577
" Malay Folklore. R. C. Ford 239
" Origins of the American Races, Professor Putnam on. (Frag.) 507
Appleton, William H., The Late. (Table) 265
Archæology: Athabascan Indian Lodge, An. (Frag.) 292
" Egyptian Exploration, Recent Years of. W. M. Flinders Petrie 625
" Ophir, The Site of. (Frag.) 736
" Vinland and its Ruins. C. Horsford * 160
Art Form, The Study of. D. Cady Eaton * 685
" Value of the Study of. G. Perrot 204
Artificial India Rubber. (Frag.) 136
Astronomy, Advance of, in the Nineteenth Century. Sir R. S. Ball. 289
" Forenoon and Afternoon. C. F. Dowd 492
" Gegenschein, The. (Frag.) 618
" Scenes on the Planets. G. P. Serviss * 337
Athabascan Indian Lodge, An. (Frag.) 392

Bacteria of the Dairy. (Frag.) 284
Ball, Sir R. S. Advance of Astronomy in the Nineteenth Century .. 289

PAGE
Baxter, William, Jr. What makes the Trolley Car go *.... 316, 408, 564
Becker, W. F., M. D. The Morbid Sense of Injury..... 596
Birds, Busy. (Frag.)..... 138
Blind Fishes of North America. C. H. Eigenmann *..... 473
Books Noticed..... 126, 268

Anthropological Institute of Great Britain, Quarterly Journal of, 277.
Astronomy, Elements of Practical. W. W. Campbell, 129.
— Stars and Telescopes. D. B. Todd, 132.
Barrett, John. The Philippine Islands and American Interests in the Far East, 133.
Beeman, W. W., and Smith, D. E. New Plane and Solid Geometry, 273.
Binet, Alfred. The Psychology of Reasoning, 274.
Biology. Living Organism, The. A. Earl, 131.
Botany. California Plants in their Homes. A. M. Davidson, 130.
— Plant Relations. J. M. Coulter, 131.
British Race, The Story of the. J. Munro, 272.
Buckley, J. M. Extemporaneous Oratory, 270.
Bullen, F. T. Idylls of the Sea, 271.
Campbell, W. W. Elements of Practical Astronomy, 129.
Chemical Jurisprudence, Notes on. H. Huntington, 133.
Cities, Growth of, in the Nineteenth Century. A. F. Weber, 126.
Civil Engineers, Proceedings of the American Association of. April, 1899, 278.
Cope, E. D. Vertebrate Remains from the Port Kennedy Deposit, 133.
Coulter, John M. Plant Relations, 131.
Cragin, Belle S. Our Insect Friends and Foes, 273.
Croke, W. J. D. Architecture, Painting, and Printing at Subiaco, 134.
Crook, James K. Mineral Waters of the United States and their Therapeutic Uses, 127.
Dalton, D. How to Swim, 277.
Davidson, Alice M. California Plants in their Homes, 130.
Diet in Illness and Convalescence. A. W. Winthrop, 271.
Earl, A. The Living Organism, 131.
Economics. Liquor Laws, Centralized Administration of. C. M. L. Sites, 275.
Electricity. Accumulators, Small. P. Marshall, 276.
Entomology. Butterflies, Everyday. S. H. Scudder, 128.
— Insect Friends and Foes. B. S. Cragin, 273.
Erlingsson, T. Ruins of the Saga Times, 277.
Fish and Fisheries, Report of United States Commission of, for Year ending June 30, 1898, 276.
Fiske, John. Through Nature to God, 268.
Gardiner, C. A. Our Right to Acquire and Hold Foreign Territory, 134.
Gellé, M. E. L'Audition et ses Organes, 128.
Gelman, F. H. Elements of Blowpipe Analysis, 279.
Geological Survey, United States, Eighteenth Annual Report, 272.
Geometry, New Plane and Solid. Beeman and Smith, 273.
Heilprin, A. Alaska and the Klondike, 270.
History of the American Nation. A. C. McLaughlin, 129.
Huntington, H. Notes on Chemical Jurisprudence, 133.
Idylls of the Sea. F. T. Bullen, 271.
Insect Friends and Foes. B. S. Cragin, 273.
Interstate Commerce Commission, Tenth Annual Report of, 276.
Jacoby, J. The Object of the Labor Movement, 279.
Knowledge, Methods of. W. Smith, 273.
Kruger, F. T. A Step Forward, 275.
Labor Movement, The Object of the, 279.
Leonard, J. W. Who's Who in America, 274.
Lucas, F. A. The Hermit Naturalist, 133.
Luquer, L. McI. Minerals in Rock Sections, 130.
McLaughlin, A. C. History of the American Nation, 129.
Marshall, P. Small Accumulators, 276.
Mathematics. Trigonometry, Elements of. H. C. Whitaker, 130.
Medicine. Transactions Wyoming State Medical Society. First and Second Regular Meetings, 279.
Memory, The Philosophy of, and Other Essays, 274.

Books Noticed:

PAGE

Mineralogy. Blowpipe Analysis, Elements of. F. H. Gelman, 279.
— Colombia, The Ores of. H. W. Nichols, 132.
— Crystals, The Characters of. A. J. Moses, 129.
— Microscopic Identification of Minerals in Rock Sections. L. McI. Luquer, 130.
Mineral Waters of the United States. James K. Crook, 127.
Montaigne on the Education of Children. L. E. Rector, 278.
Moore, J. H. Better World Philosophy, 276.
Morehouse, G. W. The Wilderness of Worlds, 131.
Moses, A. J. The Characters of Crystals, 129.
Munro, John. The Story of the British Race, 272.
Naturalist, The Hermit. F. A. Lucas, 133.
Nichols, H. W. The Ores of Colombia, 132.
Oratory, Extemporaneous. J. M. Buckley, 270.
Philosophy, Better World. J. H. Moore, 276.
— Through Nature to God. John Fiske, 268.
Physiology. Hearing and its Organs. M. E. Gellé, 128.
Port Kennedy Deposit, Vertebrate Remains from. E. D. Cope, 133.
Psychologique, L'Année. A. Binet, 278.
Psychology of Reasoning, The. A. Binet, 274.
Railway Statistics in United States, Tenth Annual Report of Interstate Commerce Commission, 276.
Reasoning, The Psychology of. A. Binet, 274.
Reason, The Dawn of. J. Weir, Jr., 275.
Rector, L. E. Montaigne on the Education of Children, 278.
Saga Times, Ruins of the. T. Erlingsson, 277.
Scudder, S. H. Everyday Butterflies, 128.
Sites, Clement M. L. Centralized Administration of the Liquor Laws, 275.
Smith, D. T. The Philosophy of Memory and Other Essays, 274.
Smith, W. Methods of Knowledge, 273.
Southern Magazine, The, 278.
Subiaco, Architecture, Painting, and Printing at. W. J. D. Croke, 134.
Swift, M. L. Anti-Imperialism, 134.
Swim, How to. D. Dalton, 277.
Todd, D. B. Stars and Telescopes, 132.
Weber, Adna Ferrin. Growth of Cities in the Nineteenth Century, 126.
Weir, J., Jr. The Dawn of Reason, 275.
Whitaker, H. C. Elements of Trigonometry, 130.
Who's Who in America. J. W. Leonard, 274.
Wilderness of Worlds, The. G. W. Morehouse, 131.
Winthrop, Alice W. Diet in Illness and Convalescence, 271.
Witt, H. Fundamental Principles of Nature, Some Observations on the, 132.
Wyoming State Medical Society, Transactions of First and Second Regular Meetings, 279.

Botanical Garden's Museum, New York. (Frag.) 733
Botany: Annual Flowers. (Frag.) 394
" Genuine Starch Factories. B. D. Halsted * 716
" Plant Names, English. (Frag.) 140
" The New Field of. B. D. Halsted 98
Briggs, C. A. Is the Christian Religion Declining? 423
Brooks, W. K. The Wonderful Century 25
Broom as a Spreader of Disease, The. (Frag.) 734
Bunsen, Death of. (Frag.) 281

Calcium, Metallic. (Frag.) 283
California, Forestry in. (Frag.) 509
Cambridge University. (An English University.) H. Stotesbury *. 14
Canals, Future of the New York. (Frag.) 735
Carbonic Acid and Climate. (Frag.) 621
Carrington, James B. Winter Birds in a City Park * 366
Cements, Action of, on Sea Water. (Frag.) 733

PAGE
Chemistry: A Hundred Years of. F. W. Clarke..... 673
" Calcium, Metallic. (Frag.)..... 283
" Hydrogen, The Solidification of. (Frag.)..... 618
" New Element, Another. (Frag.)..... 509
Children, Literature for. (Frag.)..... 618
China, Trade Corporations in. M. Courant..... 722
Christian Religion Declining? Is the. C. A. Briggs..... 423
City Roadways, Modern. N. P. Lewis*..... 524
Civilized and Savage. (Frag.)..... 141
Clarke, F. W. A Hundred Years of Chemistry..... 673
" " " The Man of Science in Practical Affairs..... 487
Climate and Carbonic Acid. (Frag.)..... 621
Colored Labor, Educated. (Frag.)..... 141
Columbus, Ohio, Geology of. (Frag.)..... 141
Commission in Difficulties, A. (Table)..... 614
Cook, O. "Ribbon Lightning"*..... 587
Courant, M. Trade Corporations in China..... 722
Criminal Jurisprudence, Decline of, in America. G. C. Speranza... 466
Criminology: Anarchist, A Paradoxical. C. Lombroso*..... 312
" Typical Criminals. Rev. S. A. Smith*..... 539

Dairy, Bacteria of the. (Frag.)..... 284
"Dark Lightning." (Frag.)..... 505
Dastre, M. A. The Scavengers of the Body..... 379
Dawson, Sir William, Death of. (Frag.)..... 390
Democracy, Real Problems of. F. Smith..... 1
Destruction of the Birds. (Frag.)..... 393
Development of the American Newspaper. W. L. Hawley*..... 186
Diamonds, Emigrant, in America. William H. Hobbs*..... 73
Dover Meeting of the British Association. (Frag.)..... 135
Dowd, C. F. Forenoon and Afternoon..... 492

Eaton, D. Cady. The Science of Art Form*..... 685
Economics: A More Excellent Way. (Table)..... 729
" Commission in Difficulties, A. (Table)..... 614
" Monopolies, The War against. (Frag.)..... 508
" Pawnshops in Germany. (Frag.)..... 736
" Pension Funds for Railroad Men. (Frag.)..... 734
" Taxation, A State Official on Excessive. F. Smith..... 645
Economy, A Question of. (Frag.)..... 283
Education: An English University. H. Stotesbury*..... 14
" Cross-. E. W. Scripture*..... 589
" Language and Life. (Table)..... 503
" Liberal, and Democracy. (Table)..... 385
" Literature for Children. (Frag.)..... 619
" Plantations for Rural School Grounds. (Frag.)..... 393
" Specialization. (Table)..... 125
" The Environment in. (Frag.)..... 391
Egyptian Exploration, Recent Years of. W. M. Flinders Petrie.... 625
Eigenmann, C. H. Blind Fishes of North America*..... 473
Electricity: Dark Lightning. (Frag.)..... 505
" From Thales to Faraday. E. T. Lesueur..... 242

PAGE
Electricity: "Ribbon Lightning." O. Cook *..... 587
Electrolysis. H. S. Wynkoop *..... 357
Element, Another New. (Frag.)..... 509
Emigrant Diamonds in America. William H. Hobbs *..... 73
Entomology: Spider Bites and "Kissing Bugs." L. O. Howard *.. 31
Evans, E. P. A Survival of Mediæval Credulity..... 577, 706
Evolutionary Variation in the Past, Rate of. (Frag.)..... 285
Exploration and Geography in 1899. (Frag.)..... 619
Explosives, The Applications of. C. E. Munroe *..... 300, 444

Faith and Knowledge. (Corr.)..... 497
Fiske's Views Compared. (Corr.)..... 498
Flinders, Petrie, W. M. Recent Years of Egyptian Exploration..... 625
Floating Stones. (Frag.)..... 735
Food Poisoning. V. C. Vaughan..... 47
" Preservatives, Expert Opinions respecting. (Frag.)..... 736
Ford, R. C. Malay Folklore..... 239
Forenoon and Afternoon. C. F. Dowd..... 492
Forestry, American Advances in. (Frag.)..... 506
" in California. (Frag.)..... 509
Fossiliferous Formation below the Cambrian, A. (Frag.)..... 139
Funafuti Atoll, Constitution of the. (Frag.)..... 283
Future of the New York Canals. (Frag.)..... 735

Gegenschein, The. (Frag.)..... 618
Geography and Exploration in 1899. (Frag.)..... 619
Geology, A Century of. J. Le Conte..... 431, 546
" Fossiliferous Formation below the Cambrian. (Frag.)... 139
" Funafuti Atoll, Constitution of the. (Frag.)..... 283
" of Columbus, Ohio. (Frag.)..... 141
Gerhard, William P. Needed Improvements in Theater Sanitation.. 84
Giddings, F. H. Exact Methods in Sociology..... 145
Glacial Lakes in New York. (Frag.)..... 391
Glangeaud, P. Wingless Birds..... 254

Halsted, B. D. Genuine Starch Factories *..... 716
" " " The New Field of Botany..... 98
Hawley, W. L. Development of the American Newspaper *..... 186
Heat Insulators. (Frag.)..... 507
Heilprin, A. A Year's Progress in the Klondike *..... 455
" " The Gold Sands of Cape Nome *..... 633
High Altitudes, Dangers of, for Elderly People. (Frag.)..... 136
Hobbs, W. H. Emigrant Diamonds in America *..... 73
Home Burdens. (Table)..... 125
Horsford, Cornelia. Vinland and its Ruins *..... 160
Howard, L. O. Spider Bites and "Kissing Bugs" *..... 31
Hydrogen, Solidification of. (Frag.)..... 618
Hygiene: Bacteria of the Dairy. (Frag.)..... 284

India Rubber, Artificial. (Frag.)..... 136
" " Cultivation of. (Frag.)..... 732

PAGE
Japanese Paper. (Frag.) 389
Jew, The Dread of the. (Frag.) 280
Jordan, D. S. Old Rattler and the King Snake 371
" " " The Education of the Neminist 176
Jordan's (President) Neminism. A. Pangloss 494

"Kissing Bugs" and Spider Bites. L. O. Howard * 31
Klondike, A Year's Progress in the. A. Heilprin * 455

Language and Life. (Table) 503
Law: Criminal Jurisprudence, Decline of, in America. G. C. Speranza 466
Le Conte, Joseph. A Century of Geology 431, 546
Lesquereux and Sullivant, Honors to. (Frag.) 285
Lesueur, E. A. Electricity from Thales to Faraday 242
Lewis, N. P. Modern City Roadways * 524
Literature for Children. (Frag.) 619
Lombroso, C. A Paradoxical Anarchist * 312

Malaria, The Mosquito Theory. Major R. Ross 42
Malay Folklore. R. C. Ford 239
Man of Science in Practical Affairs. F. W. Clarke 487
"Manuring with Brains." (Frag.) 731
Medalists, Royal Society. (Frag.) 620
Medicine: Plague Antitoxin. (Frag.) 732
" Rats and the Plague. (Frag.) 509
Meteorology: Climate and Carbonic Acid. (Frag.) 621
Mexico, Prosperity and Enterprise in. (Frag.) 283
Mineralogy: Emigrant Diamonds in America. William H. Hobbs *. 73
Miracle, A Thirteenth-Century. (Frag.) 394
Monopolies, The War against. (Frag.) 508
Montana, Alkali Soils in. (Frag.) 734
Mosquito Theory of Malaria, The. Major R. Ross 42
Munroe, E. C. The Applications of Explosives * 300, 444

Natural History: "Salamanders" and "Salamander" Cats. N. Robinson * 556
" " Whales, Longevity of. (Frag.) 618
Negro Question: Educated Colored Labor. (Frag.) 141
" " Transplantation of a Race. N. S. Shaler 513
Neminism, President Jordan's. A. Pangloss 494
Neminist, The Education of the. D. S. Jordan 176
New York Botanical Garden's Museum. (Frag.) 733
" " Glacial Lakes in. (Frag.) 391
Nome, The Gold Sands of Cape. Angelo Heilprin * 633

Ocean Depths, Animals of the. (Frag.) 736
" The Deeps of the. (Frag.) 390
Old Rattler and the King Snake. D. S. Jordan 371
Ophir, The Site of. (Frag.) 736
Oregon, Eastern Oyster Culture in. F. L. Washburn * 233

PAGE
Ornithology: Birds, Destruction of the. (Frag.) 393
" Sand Grouse, The. (Frag.) 392
" Wingless Birds. P. Glangeaud 254
" Winter Birds in a City Park. J. B. Carrington * 366
Orton, Edward, Sketch of. (Portrait) 607
Outdoor Improvement, For. (Frag.) 284
Oyster Culture, Eastern, in Oregon. F. L. Washburn * 233

Packard, R. L. Remarkable Volcanic Eruptions in the Philippines. 374
Pangloss, A. President Jordan's "Neminism" 494
Paper, Japanese. (Frag.) 389
Paris Exposition in 1900, The, and Congresses. (Frag.) 140
Park-making among the Sand Dunes. (Frag.) 139
Parliamentary Amenities Committee, The. (Frag.) 137
Parsons, C. A. Steam Turbines and High-Speed Vessels * 696
Patrick, Mary M. Woman's Struggle for Liberty in Germany 328
Pawnshops in Germany. (Frag.) 736
Pearl Mussels. (Frag.) 621
Pension Funds for Railroad Men. (Frag.) 734
Periodicity of War. (Frag.) 735
Perrot, G. Value of the Study of Art 204
Petrie, W. M. Flinders. Recent Years of Egyptian Exploration 625
Physical Investigation, Where it fails. (Frag.) 284
" Measurements of Asylum Children. (Frag.) 138
Physiology: Scavengers of the Body. M. A. Dastre 379
Plague Antitoxin. (Frag.) 732
" Rats and the. (Frag.) 509
Plantations for Rural School Grounds. (Frag.) 393
Plant Names, English. (Frag.) 140
Pseudo-Science: Neminist, The Education of the. D. S. Jordan ... 176
Psychology: Animals Reason? Do. Rev. E. R. Young * 105
" A Survival of Mediæval Credulity. E. P. Evans 577
" Morbid Sense of Injury, The. W. F. Becker, M. D. ... 596
" "Warming Up." (Frag.) 506
Public Library, The Function of the. (Table) 616
Putnam, Professor, on the Origins of the American Races. (Frag.). 507
Pygmies, Amazonian, Stories of. (Frag.) 733

Rats and the Plague. (Frag.) 509
Religion, Is the Christian, Declining? C. A. Briggs 423
Religious Suicides. (Frag.) 731
"Ribbon Lightning." O. Cook * 587
Riemer, W. E. De. Agricultural Education in Foreign Countries .. 218
Rivet, M. B. Early Experiments in Air Flight 603
Roberts, Comptroller, on Excessive Taxation. F. Smith 645
Robinson, N. "Salamanders" and "Salamander" Cats * 556
Ross, Major R. The Mosquito Theory of Malaria 42
Royal Society Medalists. (Frag.) 620

"Salamanders" and Salamander" Cats. N. Robinson * 556
Sand Dunes, Park-making among. (Frag.) 139

PAGE
Sand Grouse, The. (Frag.) 292
Sanitation: Broom, The, as a Spreader of Disease. (Frag.) 734
Scavengers of the Body. M. A. Dastre 379
Science and Dogma. (Table) 728
" of Art Form, The. D. Cady Eaton * 685
" South-Sea Bubbles in. J. Trowbridge 401
" The Man of, in Practical Affairs. F. W. Clarke 487
Scripture, E. W. Cross-Education * 589
Sea Water, Effect of, on Soil. (Frag.) 508
" " on Cements, Action of. (Frag.) 733
Serviss, G. P. Scenes on the Planets * 337
Shaler, N. S. The Transplantation of a Race 513
Simplon Tunnel, The. (Frag.) 388
Smith, Rev. S. G. Typical Criminals * 539
" Franklin. A State Official on Excessive Taxation 645
Sociology: Democracy, Real Problems of. F. Smith 1
" Exact Methods in. F. H. Giddings 145
South-Sea Bubbles in Science. J. Trowbridge 401
Specialization. (Table) 125
Spencer, H. Professor Ward on Naturalism and Agnosticism 349
Speranza, G. C. Decline of Criminal Jurisprudence in America 466
Standard Time, How Obtained. T. B. Willson 213
Starch Factories, Genuine. B. D. Halsted * 716
Steamships, Sixty Years' Improvements in. (Frag.) 506
Steam Turbines and High-Speed Vessels. C. A. Parsons * 696
Sternberg, George M., Sketch of. (Portrait) 116
Stones, Floating. (Frag.) 735
Stotesbury, H. An English University * 14
St. Prokopy, A Thirteenth-Century. (Frag.) 394
Suicides, Religious. (Frag.) 731
Survival of Mediæval Credulity. E. P. Evans 577, 706

Taxation, A State Official on Excessive. F. Smith 645
Theater Sanitation, Needed Improvements in. William P. Gerhard. 84
Trolley Car, What makes the, go? William Baxter, Jr.* .. 316, 408, 564
Trowbridge, John. Latest Developments with the X Rays * 659
" " South-Sea Bubbles in Science 401
" " Wireless Telegraphy * 59

Vagrant Electricity, Destructive Effects of. H. S. Wynkoop * 357
Vaughan, V. C. Food Poisoning 47
Vinland and its Ruins. Cornelia Horsford * 160
" The Location of. (Corr.) 500
Volcanic Eruptions in the Philippines, Remarkable. R. L. Packard. 374

"Warming Up." (Frag.) 506
War, Periodicity of. (Frag.) 735
" Spirit, The. (Table) 501
Washburn, F. L. Eastern Oyster Culture in Oregon * 233
Whales, Longevity of. (Frag.) 618
Willson, T. B. How Standard Time is Obtained 213

PAGE
Wingless Birds. P. Glangeaud..... 254
Wireless Telegraphy. John Trowbridge *..... 59
Woman's Struggle for Liberty in Germany. Mary M. Patrick..... 328
Wonderful Century, The. W. K. Brooks..... 25
Wynkoop, H. S. Destructive Effects of Vagrant Electricity *..... 357

X Rays, Latest Developments with. J. Trowbridge *..... 659

Young, Rev. E. R. Do Animals Reason? *..... 105

Zola's Anthropological Traits. (Frag.)..... 388
Zoölogy: Blind Fishes of North America. C. H. Eigenmann *.... 473

THE END.